

# Monarch Calsonite®

## A new face for building

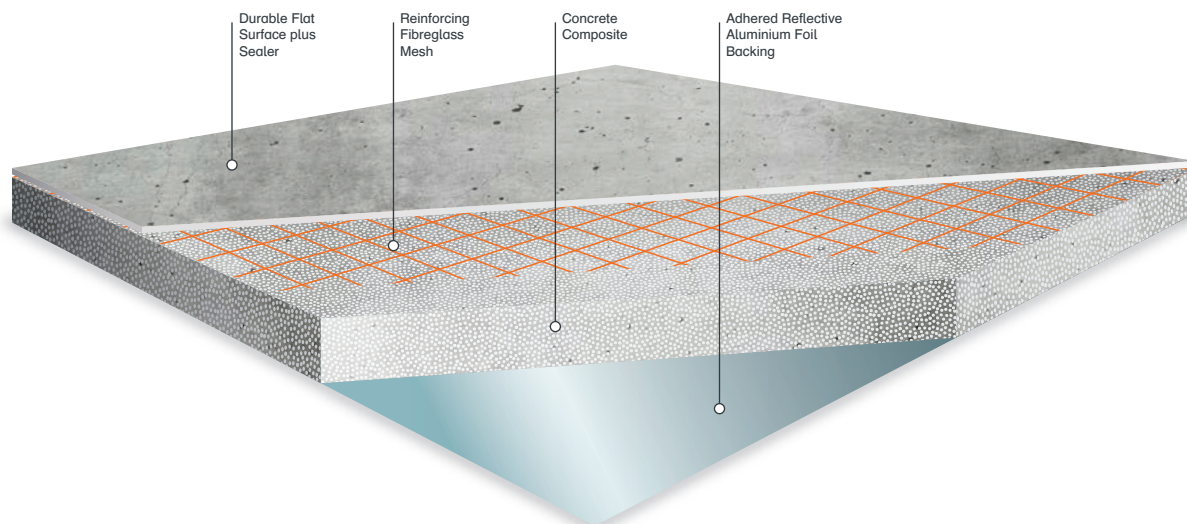
**10 times**  
tougher  
than brick\*

### What is Calsonite®?

Calsonite® is a tough, durable external cladding. It is a reinforced concrete composite material specifically developed by Monarch to maximise the benefits and performance of the Monarch Building System. With a dense surface layer, internal reinforcing and reflective foil backing, Calsonite® is produced in sheets 27mm thick, 1200mm wide and lengths of either 2358mm or 2700mm. It is manufactured to strict quality standards. It is then robotically fastened offsite to a high tensile TRUECORE® steel frame to provide tough, durable external walls for residential homes which are installed onsite in a few days. A single, site applied acrylic render to the smooth external Calsonite® face provides the final, clean surface finish.

### 10 Year Warranty\*\*

When supplied as part of a Monarch Wall, Calsonite® is warranted for a period of 10 years\*\* to not materially degrade, break down or crack and to be free from manufacturing defects. This warranty extends to its factory jointing and attachment to the Monarch Steel Frame.



**Build outside the box**

\* Based on a 3 point bend test  
\*\* Subject to the Product Warranty (Monarch Manufactured Building System).  
Conditions available at [www.monarchbuilding.com.au](http://www.monarchbuilding.com.au)

# Advantages of Calsonite®

The strength and durability of Calsonite® is the result of more than 10 years of advanced materials development and engineering. A reinforced concrete composite, it delivers benefits beyond those associated with traditional masonry and modern lightweight cladding.

## 10 times tougher than brick\*

A concrete composite reinforced with fibreglass mesh, Calsonite® passes the 'knock test' and is not 'drummy' like fibre cement claddings. It is tough and durable whilst also accommodating a degree of slab movement without cracking. Independent tests also show that Calsonite® has at least 10 times more deflection before breakage than brick.

## 6 Star Energy Rating without bulk insulation in most situations

Calsonite® meets most Queensland insulation requirements without the need for additional bulk insulation.

## Fire Resistant

Calsonite® fastened to a 78mm steel frame, cavity filled with CSR Fibertex 350 Rockwool and internally lined with standard non-fire rated plasterboard, achieves an FRL of 0/60/60 (tested by CSIRO).

## Water Resistant

Complete waterproofing is afforded by two stages of moisture resistance: the aluminium foil backing to Calsonite® and the acrylic render applied onsite. This means that the frame, insulation and internal finishes remain dry, clean and free from rot, corrosion and mould. CSIRO testing for water penetration & leakage in accordance with ASTM E514-03 found "no evidence of water penetration on the back or sides of the panel" and that "no water had penetrated within 10mm of the test panel surface".

## No risk of rust

The absence of any steel in Monarch Calsonite® means that there is no risk of the board rusting.

## Nearly half the Embodied Energy of Brick

Embodied Energy is a measure of the total energy required to produce a product. Products which have a lower embodied energy per 'unit' contribute less to greenhouse gas emission and their consequential effects on the environment. Production of Calsonite® requires 49% less energy than brick.

## Reduces your total cost and time to build

Calsonite® does away with the need for bricklayers and as part of the Monarch Building System it is faster and easier to install and requires fewer trades onsite.

## Contact Monarch

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